

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A printing mechanism of a machine of the tobacco processing industry comprising:

a tempering device, structured and arranged to adjust a temperature of ink in at least one of an ink nozzle, ink supply and metering device.

2. (Original) The printing mechanism in accordance with claim 1, wherein the machine is a cigarette rod machine.

3. (Original) The printing mechanism in accordance with claim 1, wherein said tempering device comprises at least one of at least one heating device and or at least one cooling device.

4. (Currently Amended) The printing mechanism in accordance with claim 3, ~~further comprising an ink supply, a metering device, and a ink nozzle, and~~ wherein said heating element ~~being device is~~ located with at least one of said ink supply, metering device, and ink nozzle.

5. (Original) The printing mechanism in accordance with claim 3, wherein said heating element comprises at least one of a heating cartridge and a heat sensor.

6. (Currently Amended) The printing mechanism in accordance with claim 3, ~~further comprising an ink supply, a metering device, an ink nozzle, and a temperature sensor,~~

wherein said temperature sensor is positioned one of:

- (a) near at least one of said ink supply, metering device, and ink nozzle; or
- (b) on or in at least one of said ink supply, metering device, and ink nozzle.

7. (Original) The printing mechanism in accordance with claim 3, wherein said cooling element comprises a cooling plate.

8. (Original) The printing mechanism in accordance with claim 7, wherein said cooling element is structured and arranged for a medium to flow through the cooling element.

9. (Currently Amended) The printing mechanism in accordance with claim 7, ~~further comprising an ink supply, a metering device, and an ink nozzle,~~

wherein said ink supply, metering device, and ink nozzle are at least partially located on the cooling plate.

10. (Original) The printing mechanism in accordance with claim 7, wherein said cooling element comprises a device structured to produce a cooled air flow.

11. (Original) The printing mechanism in accordance with claim 7, wherein said cooling element comprises an eddy current generator.

12. (Original) The printing mechanism in accordance with claim 1, wherein said tempering device comprises a control or regulating unit.

13. (Currently Amended) The printing mechanism in accordance with claim 1, ~~further comprising~~ wherein the at least one of an ink nozzle, ink supply and metering device comprises an ink nozzle.

14. (Original) The printing mechanism in accordance with claim 13, further comprising a heating cartridge located one of integrally in said ink nozzle or to lie against said ink nozzle.

15. (Previously presented) The printing mechanism in accordance with claim 13, further comprising a temperature sensor located one of in and on said ink nozzle.

16. (Original) The printing mechanism in accordance with claim 13, further comprising a plurality of distributor rollers, a stamp roller, and a pressure roller,

wherein two of said plurality of distributor rollers are arranged to receive ink from said ink nozzle, and said stamp roller and said pressure roller are arranged to guide a paper strip to be printed.

17. (Original) The printing mechanism in accordance with claim 13, further comprising a device to measure ink pressure before discharge from said ink nozzle.

18. (Currently Amended) A process for printing with a printing mechanism that includes a tempering device, said process comprising:

adjusting a temperature of ink in at least one of an ink nozzle, ink supply and metering device in the printing mechanism via the tempering device.

19. (Original) The process in accordance with claim 18, wherein the printing mechanism is located within a machine of the tobacco processing industry.

20. (Original) The process in accordance with claim 19, wherein said machine is a cigarette rod machine.

21. (Original) The process in accordance with claim 18, wherein the tempering device includes at least one of at least one heating element and at least one cooling element, and

wherein the ink temperature is adjusted by the at least one of the at least one heating device and the at least one cooling device.

22. (Currently Amended) The process in accordance with claim 21, wherein the ink temperature is adjusted in the at least one of ~~an~~ the ink supply, a the metering device, and ~~an~~ the ink nozzle of the printing mechanism by the at least one heating element.

23. (Original) The process in accordance with claim 22, wherein the at least one heating element comprises a heating cartridge.

24. (Original) The process in accordance with claim 21, wherein the at least one cooling element comprises a cooling plate, and

wherein the ink temperature is adjusted by the cooling plate.

25. (Original) The process in accordance with claim 24, further comprising flowing a medium through the cooling element.

26. (Original) The process in accordance with claim 21, wherein at least some components of the printing mechanism are located at least partially on the cooling plate, whereby the components are cooled by the cooling plate.

27. (Original) The process in accordance with claim 21, wherein the at least one cooling element comprises a device producing a cooled air flow, and

the ink temperature is adjusted by directing the cooled air flow toward a portion of the printing mechanism.

28. (Original) The process in accordance with claim 18, further comprising controlling or regulating the tempering device through a control or regulation device.

29. (Original) The process in accordance with claim 18, further comprising heating the ink in the ink nozzle.

30. (Original) The process in accordance with claim 18, further comprising detecting a temperature of the ink in the ink nozzle.

31. (Original) The process in accordance with claim 18, further comprising measuring ink pressure before discharge from the ink nozzle.

32. (Original) A machine of the tobacco processing industry comprising the printing mechanism in accordance with claim 1.

33. (Original) The machine in accordance with claim 32, wherein said machine is a cigarette rod machine.

34. (Original) A process for printing a cigarette paper strip in the machine in accordance with claim 32, said process comprising:

guiding the cigarette paper strip to a printing mechanism having a tempering device;
and

adjusting at least one of a temperature and a viscosity of the ink in the printing mechanism via the tempering device.